Amendments to the Claims

Please amend the claims as follows:

1. (Previously Presented). A Neisserial bacterium in which the expression of an Imp protein is functionally downregulated such that the level of LPS in the outer membrane is decreased compared to wild-type Neisserial bacterium.

2. (Previously Presented). The Neisserial bacterium of claim 1 wherein the Imp expression is functionally downregulated by downregulating expression from an *imp* gene.

3. (Previously Presented). The Neisserial bacterium of claim 1 wherein the Imp expression is functionally downregulated by disrupting the structure of the Imp protein.

4. (Previously Presented). The Neisserial bacterium of claim 3 wherein at least one of the extracellular loops of the Imp protein is disrupted by inserting a sequence from a different protein into the loop to make a chimeric protein.

5. (Previously Presented). The Neisserial bacterium of claim 3 wherein the structure of the Imp protein is disrupted by removing part of the sequence of the Imp protein and optionally replacing it with a sequence from a different protein to make a chimeric protein.

6. (Previously Presented). The Neisserial bacterium of claim 5 wherein at least part of at least one extracellular loop of the Imp protein is removed and optionally replaced with a sequence from a different protein to make a chimeric protein

7. (Previously Presented). The Neisserial bacterium of claim 1, in which the expression of an MsbA protein is functionally downregulated such that the level of LPS in the outer membrane is decreased compared to wild-type Neisserial bacterium.

8. (Previously Presented). The Neisserial bacterium of claim 7 wherein the MsbA expression is functionally downregulated by downregulating expression from an msbA gene.

9. (Previously Presented). The Neisserial bacterium of claim 7 wherein the MsbA expression is functionally downregulated by disrupting the structure of the MsbA protein

10. (Previously Presented). The Neisserial bacterium of claim 1 wherein the bacterium is *Neisseria meningitidis*.

11. (Previously Presented). A chimeric protein comprising at least one part which is derived from an Imp protein from a Neisserial strain and at least one part which is derived from at least one different protein, wherein the chimeric protein has a disruption in transporting LPS to the outer membrane.

12. (Previously Presented). The chimeric protein of claim 11 wherein at least one part derived from at least one different protein is inserted into at least one extracellular loop of Imp.

13. (Previously Presented). The chimeric protein of claim 12 wherein at least a portion of at least one extracellular loop from Imp is deleted and replaced with at least one part derived from at least one different protein.

14. (Previously Presented). The chimeric protein of claim 11 comprising at least one extracellular loop from an Imp protein linked to a polypeptide sequence from at least one different protein.

15. (Previously Presented). The chimeric protein of claim 11 wherein the Imp protein is from *N. meningitidis*.

16. (Previously Presented). The chimeric protein of claim 11 wherein the Imp protein part of the chimeric protein has a sequence sharing at least 80% identity with the corresponding sequence of SEQ ID No 1.

17. (Previously Presented). The chimeric protein of claim 11 which has a sequence sharing at least 60% identity with the sequence of SEQ ID No. 1.

18. (Previously Presented). The chimeric protein of claim 11 wherein the part derived from a different protein comprises an epitope capable of generating an immune response against a Neisserial protein.

19. (Previously Presented). The chimeric protein of claim 11 wherein the chimeric protein has impaired LPS transporter function compared to the LPS transporter function of a wild-type Imp protein from which it is derived.

20. (Previously Presented). The chimeric protein of claim 11 wherein the part derived from a different protein is inserted into loop 3 of Imp and optionally at least part of the loop 3 is deleted.

21. (Previously Presented). The chimeric protein of claim 11 wherein an Imp sequence corresponding to amino acids 357-416 or a portion thereof of SEQ ID No. 1 is deleted and optionally replaced with a part derived from a different protein.

22. (Previously Presented). The chimeric protein of claim 11 wherein the part derived from a different protein is inserted into loop 8 of Imp and optionally at least part of the loop is deleted.

23. (Previously Presented). The chimeric protein of claim 11 wherein an Imp sequence corresponding to amino acids 648-697 or a portion thereof of SEQ ID No. 1 is deleted and optionally replaced with a part derived from a different protein.

24. (Previously Presented). The chimeric protein of claim 11 wherein the part derived from a different protein is inserted into loop 6 of Imp and optionally at least part of the loop is deleted.

25. (Previously Presented). The chimeric protein of claim 11 wherein an Imp sequence corresponding to amino acids 537-576 or portion thereof of SEQ ID No. 1 is deleted and optionally replaced with a part derived from a different protein.

26. (Previously Presented). The chimeric protein of claim 11 wherein the part derived from a different protein is inserted into loop 2 of Imp and optionally at least part of the loop is deleted.

27. (Previously Presented). The chimeric protein of claim 11 wherein an Imp sequence corresponding to amino acids 295-332 or portion thereof of SEQ ID No. 1 is deleted and optionally replaced with a part derived from a different protein.

28. (Previously Presented). The chimeric protein of claim 11 wherein the part derived from a different protein is inserted into loop 1 of Imp and optionally at least part of the loop is deleted.

29. (Previously Presented). The chimeric protein of claim 11 wherein an Imp sequence corresponding to amino acids 252-271 or portion thereof of SEQ ID No. 1 is deleted and optionally replaced with a part derived from a different protein.

30. (Previously Presented). The chimeric protein of claim 11 wherein the part derived from a different protein is inserted into loop 5 of Imp and optionally at least part of the loop is deleted.

31. (Previously Presented). The chimeric protein of claim 11 wherein an Imp sequence corresponding to amino acids 482-501 or portion thereof of SEQ ID No. 1 is deleted and optionally replaced with an insert part derived from a different protein.

32. (Previously Presented). The chimeric protein of claim 11 wherein the part derived from a different protein is inserted into loop 9 of Imp and optionally at least part of the loop is deleted.

33. (Previously Presented). The chimeric protein of claim 11 wherein an Imp sequence corresponding to amino acids 721-740 or portion thereof of SEQ ID No. 1 is deleted and optionally replaced with a part derived from a different protein.

34. (Previously Presented). The chimeric protein of claim 11 wherein at least one part derived from a different protein is an *N. meningitidis* protein.

35. (Previously Presented). The chimeric protein of claim 34 wherein at least one part is derived from PorA.

36. (Previously Presented). The chimeric protein of claim 35 wherein 2 or more parts are derived from 2 or more PorA proteins from different serosubtypes of N. meningitidis.

37. (Previously Presented). The chimeric protein of claim 34 wherein at least one part is derived from Hsf.

38. (Previously Presented). The chimeric protein of claim 34 wherein at least one part is derived from TbpA.

39. (Previously Presented). The chimeric protein of claim 34 wherein at least one part is derived from TbpA –high molecular weight and at least one different part is derived from TbpA – low molecular weight.

40. (Previously Presented). The chimeric protein of claim 34 wherein at least one insert part is derived from NspA .

41. (Previously Presented). The chimeric protein of claim 34 wherein at least one part is a peptide mimotope of a Neisserial LOS.

42. (Previously Presented). The chimeric protein of claim 34 wherein at least one part is derived from Hap.

43. (Previously Presented). The chimeric protein of claim 11 wherein at least one part is derived from a S. pneumoniae protein.

44. (Previously Presented). The chimeric protein of claim 11 wherein at least one part derived from a different protein is surface exposed in the bacterial strain from which it is derived.

45. (Currently amended) A polynucleotide comprising a sequence encoding the chimeric protein of ~~any one of~~ claim 11.

46. (Previously Presented). An expression vector comprising the polynucleotide of claim 45.

47. (Previously Presented). A host cell comprising the expression vector of claim 46.

48. (Currently Amended). An outer membrane vesicle preparation ~~derived~~ from ~~the bacterium of claim 1~~ a Neisserial bacterium that expresses Imp protein ~~or the host cell of claim 47 or comprising the chimeric protein of claim 11~~ wherein expression of the Imp protein is functionally downregulated by disrupting the structure of the Imp

protein such that the level of lipopolysaccharide in the outer membrane is decreased compared to a wild-type Neisserial bacterium,

wherein at least one of the extracellular loops of the Imp protein is disrupted by inserting a sequence from a different protein into the loop to make a chimeric protein,

wherein the chimeric protein comprises at least one part from an Imp protein and at least one part from a Neisserial Hsf protein,

wherein the part from a Neisserial Hsf protein is inserted into loop 8 of the Imp protein.

49. (Previously Presented). The outer membrane vesicle preparation of claim 48 derived from *N. meningitidis* wherein the amount of LPS in the outer membrane vesicle is reduced compared to the amount of LPS in an outer membrane vesicle preparation derived from a strain of *N. meningitidis* where Imp or MsbA is not functionally disrupted.

50. (Previously Presented). The outer membrane vesicle preparation of claim 48 wherein the level of LPS is sufficiently low so that the toxicity is reduced to a level at which the outer membrane vesicle preparation has an acceptable level of reactogenicity when inoculated into a patient.

51. (Previously Presented). The outer membrane vesicle preparation of claim 48 wherein LPS present in the outer membrane vesicles is intra-vesicle cross-linked to outer membrane proteins in the outer membrane vesicle.

52. (Previously Presented). The outer membrane vesicle preparation of claim 48 wherein the concentration of lipoproteins in the outer membrane vesicles is equivalent to the concentration of lipoproteins from outer membrane vesicles derived from a non-detergent extraction process.

53. (Previously Presented). A method for producing the chimeric protein of claim 11 comprising the steps of culturing the host cell of claim 47 under conditions under which the chimeric protein is expressed and recovering the expressed chimeric protein.

54. (Previously Presented). A method for producing the outer membrane vesicle preparation of claim 48 comprising the step of culturing the host cell of claim 47 or the bacterium of claim 1.

55. (Previously Presented). A pharmaceutical composition comprising the bacterium of claim 1 or a fraction or membrane thereof, the chimeric protein of claim 11 or the outer membrane vesicle preparation of claim 48 and a pharmaceutically acceptable carrier.

56. (Previously Presented). The pharmaceutical composition of claim 55 in the form of a vaccine.

57. (Previously Presented). The pharmaceutical composition of claim 55 further comprising one or more bacterial capsular polysaccharides or oligosaccharides.

58. (Previously Presented). The pharmaceutical composition of claim 57 wherein the one or more capsular polysaccharides or oligosaccharides is derived from bacteria selected from the group consisting of N. meningitidis serogroup A, C, Y and/or W-135, Haemophilus influenzae b, Streptococcus pneumoniae, and are preferably conjugated to a source of T-helper epitopes.

59. (Previously presented). A method of preventing or treating a Neisserial infection by administering the chimeric protein of claim 11 or the outer membrane vesicle preparation of claim 48 or the pharmaceutical composition of claim 55 to a patient in need thereof.

60. (Cancelled).